

#### ABSTRACT

A method and apparatus for producing blood component products. In one embodiment, a plurality of a predetermined type of blood component is harvested from a source of whole blood. At least two on-line yield determination techniques are utilized to determine the yield for the harvested blood components. One is a predetermined yield prediction technique and the second is a predetermined yield monitoring technique, each of which are individually calibrated in relation to a predetermined off-line yield determination technique. The predetermined yield prediction and monitoring techniques each provide the yield for the harvested blood components and each is then utilized to provide a determined yield. Consequently, when the harvested blood components are packaged the determined yield may be associated therewith, thereby providing a blood component product.